



# UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE  
United States Patent and Trademark Office  
Address: COMMISSIONER FOR PATENTS  
P.O. Box 1450  
Alexandria, Virginia 22313-1450  
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/510,684	10/08/2004	Noriko Endou	Q83593	3894
23373 7590 03/24/2009 SUGHRUE MION, PLLC 2100 PENNSYLVANIA AVENUE, N.W. SUITE 800 WASHINGTON, DC 20037			EXAMINER PENG, KUO LIANG	
			ART UNIT 1796	PAPER NUMBER
			MAIL DATE 03/24/2009	DELIVERY MODE PAPER

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

### Office Action Summary

**Application No.**

10/510,684

**Applicant(s)**

ENDOU ET AL.

**Examiner**

Kuo-Liang Peng

**Art Unit**

1796

**-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --**  
**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 12/31/08 Suppl. Amendment.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1,3-5,7-14,19-24 and 36-53 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☒ Claim(s) 1,3-5,7-11,13,14,19-24,36-44 and 46-53 is/are allowed.
- 6) ☒ Claim(s) 12 and 45 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☒ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- 1) ☐ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO/SB/08)  
Paper No(s)/Mail Date 11/25/08
- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date \_\_\_\_\_
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: \_\_\_\_\_

### **DETAILED ACTION**

1. A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submissions filed November 25, 2008 and December 31, 2008 have been entered. Claims 1, 3, 5, 7-13 and 19-20 are amended. Claims 2, 6, 15-18 and 25-35 are deleted. Claims 36-53 are added. Now, Claims 1, 3-5, 7-14, 19-24 and 36-53 are pending.
2. Claim rejection(s) under 35 USC 103 in the previous Office Action (Paper No. 20080524) is/are removed.
3. The text of those sections of Title 35, U.S. code not included in this action can be found in prior Office Action(s).

***Claim Rejections - 35 USC § 102/103***

4. Claims 12 and 45 are rejected under 35 U.S.C. 102(b) as anticipated by or, in the alternative, under 35 U.S.C. 103(a) as obvious over Ozawa (WO 01/34658).

The following column and line numbers of Ozawa are based on its' US equivalent, US 6 992 147.

Ozawa discloses a composition comprising a modified polymer derived by a process of treating a pseudo-living polymer with a hydrocarbyloxysilane compound according to the instant claims. (col. 5, line 38 to col. 11, lines 24) Ozawa further teaches the **condensation** of the modified polymer. (col. 12, lines 18-38) Ozawa is silent on the claimed process for preparing the condensed modified polymer. However, the instant claims are product-by-process claims. "Even though product-by-process claims are limited by and defined by the process, determination of patentability is based on the product itself. The patentability of a product does not depend on its method of production. If the product in the product-by-process claim is the same as or obvious from a product of the prior art, the claim is unpatentable even though the prior product was made by a different process" *In re Thorpe*, 777 F. 2d 695, 698, 227 USPQ 964, 966 (Fed. Cir. 1985). "The Patent Office bears a lesser burden of proof in making out a case of prima facie obviousness for product-by-process claims because of their peculiar nature" than when a product is claimed in the conventional fashion. *In re Fessmann*, 489

F.2d 742, 744, 180 USPQ 324, 326 (CCPA 1974). Once the examiner provides a rationale tending to show that the claimed product appears to be the same or similar to that of the prior art, although produced by a different process, the burden shifts to applicant to come forward with evidence establishing an unobvious difference between the claimed product and the prior art product. *In re Marosi*, 710 F.2d 798, 802, 218 USPQ 289, 292 (Fed. Cir. 1983) "[T]he lack of physical description in a product-by-process claim makes determination of the patentability of the claim more difficult, since in spite of the fact that the claim may recite only process limitations, it is the patentability of the product claimed and not of the recited process steps which must be established. We are therefore of the opinion that when the prior art discloses a product which reasonably appears to be either identical with or only slightly different than a product claimed in a product-by-process claim, a rejection based alternatively on either section 102 or section 103 of the statute is eminently fair and acceptable. As a practical matter, the Patent Office is not equipped to manufacture products by the myriad of processes put before it and then obtain prior art products and make physical comparisons therewith." *In re Brown*, 459 F.2d 531, 535, 173 USPQ 685, 688 (CCPA 1972).

*Allowable Subject Matter*

5. Claims 1, 3-5, 7-11, 13-14, 19-24, 36-44 and 46-53 are allowed.

6. The following is an examiner's statement of reasons for allowance:

The present claims are allowable for at least the following reason(s) over the closest references: Haynes (EP 067 468, US 4 379 891), Ozawa (WO 01/34658, US 6 191 247), Takeishi908 (US 6 228 908), Hogan (US 6 573 412), Morita (US 6 369 167) and Takeishi295 (US 6 008 295)

Haynes discloses a method of producing a modified polymer derived by a process of treating a living polymer with a hydrocarbyloxysilane compound such as  $\gamma$ -glycidoxypolytrimethoxysilane (GPTS). However, Haynes does not teach or fairly suggest a step of **condensing** the modified polymer to obtain a condensed polymer.

Ozawa discloses a composition comprising a modified polymer derived by a process of treating a pseudo-living polymer with a hydrocarbyloxysilane compound according to the instant claims. (col. 5, line 38 to col. 11, lines 24) The relative amount of the hydrocarbyloxysilane to the lanthanide is described in col. 11, lines 20-24. However, Ozawa does not teach or fairly suggest the claimed

process where an **alkaline metal** compound and/or an **alkaline earth metal** compound is/are employed as polymerization initiator(s).

Takeishi908 discloses a composition comprising a modified polymer derived by a process of treating a living polymer with a hydrocarbyloxysilane compound according to the instant claims. (col. 3, line 58 to col. 9, line 3 and Examples) However, Takeshi908 does not teach or fairly suggest a step of **condensing** the modified polymer to obtain a condensed polymer.

Hogan discloses a composition comprising a modified polymer derived by a process of treating a living polymer with a hydrocarbyloxysilane compound according to the instant claims. (col. 4, line 66 to col. 14, line 21 and Examples) However, Hogan does not teach or fairly suggest a step of **condensing** the modified polymer to obtain a condensed polymer.

Morita discloses a composition comprising a modified polymer derived by a process of treating a living polymer with a hydrocarbyloxysilane compound according to the instant claims. (col. 3, line 65 to col. 7, line 35 and Examples) However, Morita does not teach or fairly suggest a step of **condensing** the modified polymer to obtain a condensed polymer.

Takeichi295 discloses a composition comprising a modified polymer derived by a process of treating a living polymer with a hydrocarbyloxysilane

compound according to the instant claims. (col. 2, line 21 to col. 3, line 11, col. 4, line 14 to col. 8, line 55 and Examples) However, Takeichi295 does not teach or fairly suggest a step of **condensing** the modified polymer to obtain a condensed polymer.

7. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Kuo-Liang Peng whose telephone number is (571) 272-1091. The examiner can normally be reached on Monday-Friday from 8:30 AM to 5:00 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Jim Seidleck, can be reached on (571) 272-1078. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair->



Art Unit: 1796

direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

klp

March 19, 2008

/Kuo-Liang Peng/

Primary Examiner, Art Unit 1796